



iFLOW-200™

MEASURE THE THERMAL & HYDRAULIC PERFORMANCE OF COLD PLATES



FEATURES & BENEFITS

- » **iFLOW-200™** measures a cold plate's inlet/outlet fluid temperature, surface temperature, coolant volumetric flow rate and pressure drop by providing different flow rates to the cold plate.
- » **iFLOW-200™** measures coolant temperature from 0-70°C with accuracy of $\pm 1^\circ\text{C}$, using K-type thermocouples. Distilled water is used as the reference coolant.
- » **iFLOW-200™** measures cold plate differential pressure up to 103,000 Pa (15 psi) with pressure measurement of $\pm 1\%$ of full scale.
- » **iFLOW-200™** features a separate control box and hydraulics units with USB connections.
- » **iFLOW-200™** includes user-friendly **coolingVIEW™** application software that automates the testing of a cold plate by setting the required parameters.
- » **iFLOW-200™** software, **coolingVIEW™**, calculates thermal resistance and pressure drop of the cold plate as a function of flow rate for selected liquids other than distilled water.

The **iFLOW-200™** system measures the thermal and hydraulic characteristics of a cold plate. It replaces the complex process of varying the volumetric flow rate of the coolant, and measuring the pressure drop and temperature of the cold plate. **iFLOW-200™** users simply set up the starting flow, ending flow, number of test points, dwell time, power applied to the cold plate and other parameters in the **coolingVIEW™** software and run the application.

OVERALL DIMENSIONS (D x W x H)

365 mm x 425 mm x 120 mm

MAXIMUM VOLUMETRIC FLOW RATE

4.5 liter/min

FLOW TEMPERATURE RANGE

0 to 70 °C

SURFACE TEMPERATURE RANGE

0 to 200 °C

DIFFERENTIAL PRESSURE RANGE

$\pm 103,000$ Pa(15 psi)

PRESSURE ACCURACY

$\pm 1\%$ of full scale

TEMPERATURE ACCURACY

$\pm 1^\circ\text{C}$

FLOW RATE ACCURACY

$\pm 1\%$ of full scale

SOFTWARE

coolingVIEW™

FEATURES:



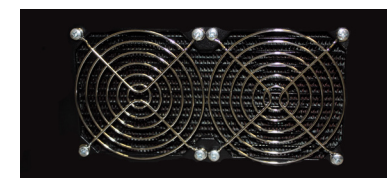
FLUID LEVEL INDICATOR



INLET/OUTLET OF THE COLD PLATE



SENSOR PORTS



COOLING SYSTEM FOR THE INTERNAL HEAT EXCHANGER

APPLICATION DOMAIN

- » Evaluating and troubleshooting different cold plate models
- » Simulating different applications and conditions
- » Optimizing flow and thermal performance
- » Testing alternative liquids
- » **Free Lifetime Tech Support**

For further technical information, please contact Advanced Thermal Solutions, Inc. at **1-781-769-2800** or **www.qats.com**